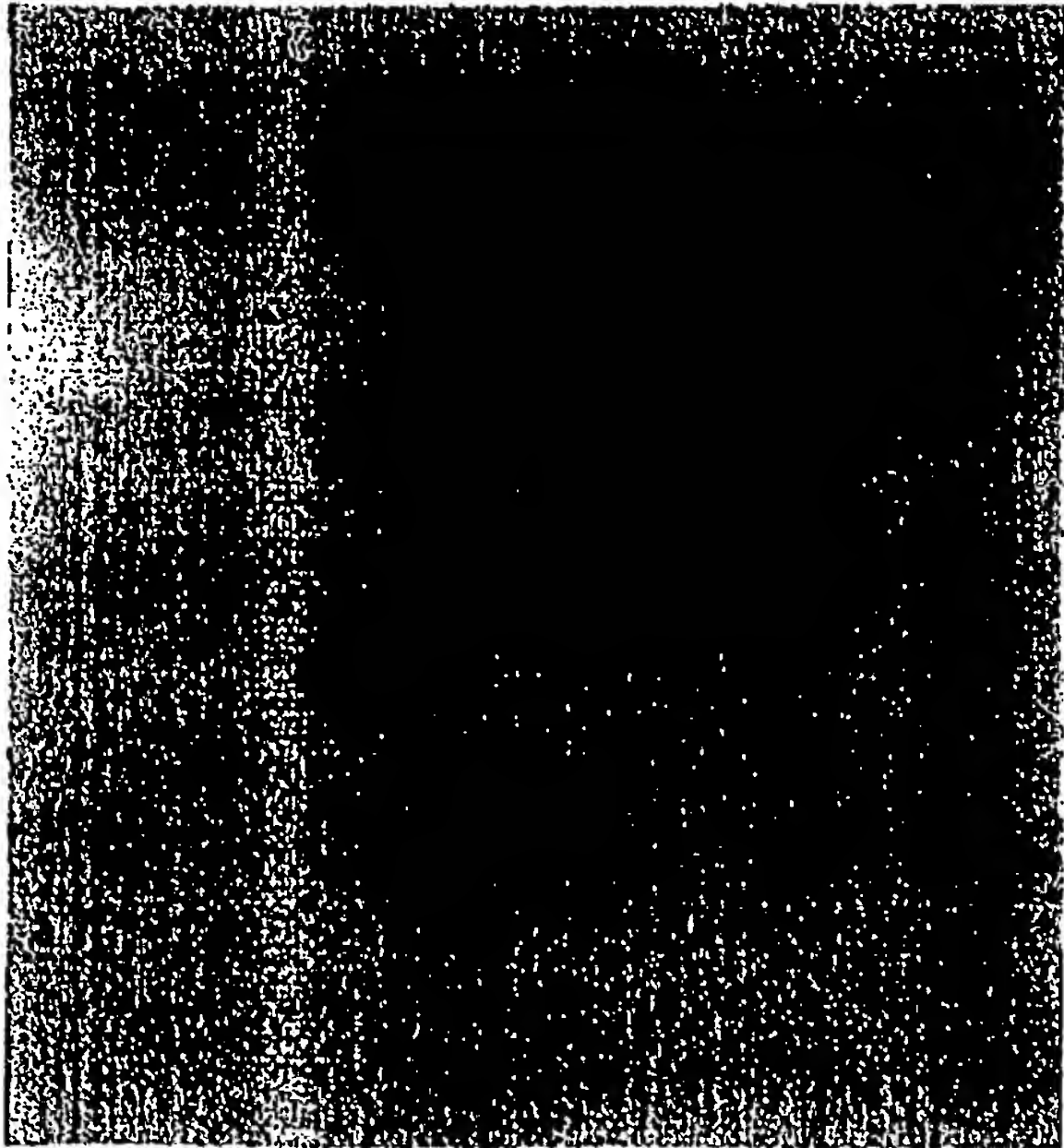




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**INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)**

<p><b>(51) International Patent Classification <sup>6</sup> :</b>  <b>C07K 14/00</b></p>	<p><b>A2</b></p>	<p><b>(11) International Publication Number:</b> <b>WO 98/24811</b></p> <p><b>(43) International Publication Date:</b> 11 June 1998 (11.06.98)</p>							
<table border="0" style="width:100%;"> <tr> <td style="width:50%; vertical-align: top;"> <p><b>(21) International Application Number:</b> PCT/US97/20888</p> <p><b>(22) International Filing Date:</b> 20 November 1997 (20.11.97)</p> <p><b>(30) Priority Data:</b>                          08/759,657                      6 December 1996 (06.12.96)      US                          08/933,455                      18 September 1997 (18.09.97)      US</p> <p><b>(71) Applicant:</b> ZYMOGENETICS, INC. [US/US]; 1201 Eastlake Avenue East, Seattle, WA 98102 (US).</p> <p><b>(72) Inventors:</b> GILBERT, Teresa; 246 12th Street S.E., Seattle, WA 98002 (US). CONKLIN, Darrell, C.; Apartment 2, 2332 Minor Avenue East, Seattle, WA 98102 (US). HART, Charles, E.; 20114 183rd Place N.E., Woodinville, WA 98072 (US). NYGAARD, Sean; 13625 S.E. 44th Street, Bellevue, WA 98006 (US). SHEPPARD, Paul, O.; 20717 N.E. 2nd Street, Redmond, WA 98053 (US).</p> <p><b>(74) Agent:</b> PARKER, Gary, E.; ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA 98102 (US).</p> </td> <td style="width:50%; vertical-align: top;"> <p><b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b>  <i>Without international search report and to be republished upon receipt of that report.</i></p> </td> </tr> </table>			<p><b>(21) International Application Number:</b> PCT/US97/20888</p> <p><b>(22) International Filing Date:</b> 20 November 1997 (20.11.97)</p> <p><b>(30) Priority Data:</b>                          08/759,657                      6 December 1996 (06.12.96)      US                          08/933,455                      18 September 1997 (18.09.97)      US</p> <p><b>(71) Applicant:</b> ZYMOGENETICS, INC. [US/US]; 1201 Eastlake Avenue East, Seattle, WA 98102 (US).</p> <p><b>(72) Inventors:</b> GILBERT, Teresa; 246 12th Street S.E., Seattle, WA 98002 (US). CONKLIN, Darrell, C.; Apartment 2, 2332 Minor Avenue East, Seattle, WA 98102 (US). HART, Charles, E.; 20114 183rd Place N.E., Woodinville, WA 98072 (US). NYGAARD, Sean; 13625 S.E. 44th Street, Bellevue, WA 98006 (US). SHEPPARD, Paul, O.; 20717 N.E. 2nd Street, Redmond, WA 98053 (US).</p> <p><b>(74) Agent:</b> PARKER, Gary, E.; ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA 98102 (US).</p>	<p><b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b>  <i>Without international search report and to be republished upon receipt of that report.</i></p>					
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<p><b>(54) Title:</b> VASCULAR ENDOTHELIAL GROWTH FACTOR</p> <p><b>(57) Abstract</b></p> <p>Growth factors, their component polypeptides, methods of making them, polynucleotides encoding them, and methods of using them are disclosed. The growth factors are homodimeric or heterodimeric proteins having component polypeptide chains that each comprises a sequence of amino acid residues that is at least 80 % identical in amino acid sequence to residues 109 to 197 of SEQ ID NO:2. The growth factors are mitogenic for fibroblasts and smooth muscle cells, and may be used therapeutically or <i>in vitro</i> to stimulate cell growth, or to develop inhibitors of cell growth.</p>									
<table border="0" style="width:100%;"> <tr> <td style="width:10%;"><b>Mr</b></td> <td style="width:10%;"><b>1</b></td> <td style="width:10%;"><b>2</b></td> <td style="width:10%;"><b>3</b></td> <td style="width:10%;"><b>4</b></td> <td style="width:10%;"><b>5</b></td> <td style="width:10%;"><b>6</b></td> </tr> </table> <div style="display: flex; align-items: flex-start;"> <div style="width: 15%; text-align: right;"> <p><b>200 -</b></p> <p><b>97 -</b></p> <p><b>66 -</b></p> <p><b>55 -</b></p> <p><b>36 -</b></p> <p><b>31 -</b></p> <p><b>21 -</b></p> <p><b>14 -</b></p> <p><b>6 -</b></p> <p><b>2.5 -</b></p> </div>  </div>			<b>Mr</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
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